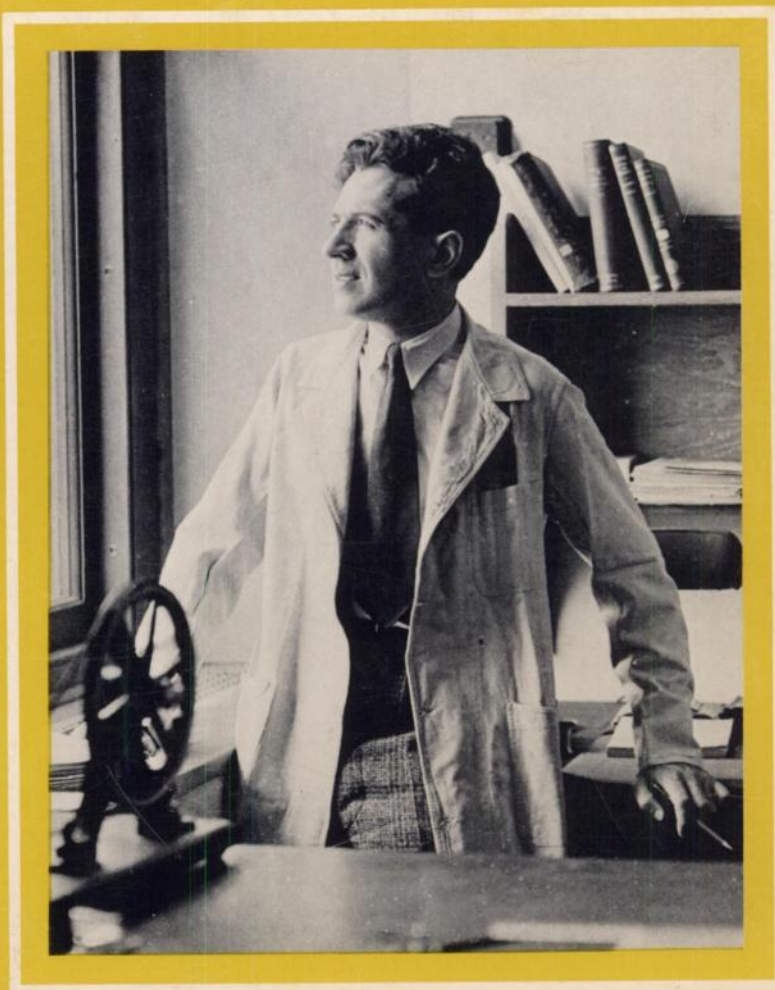
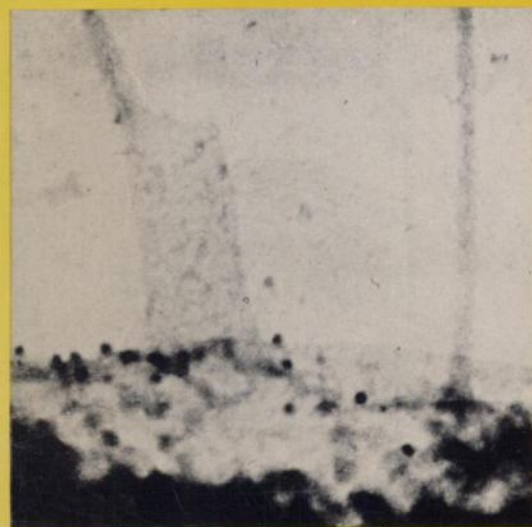
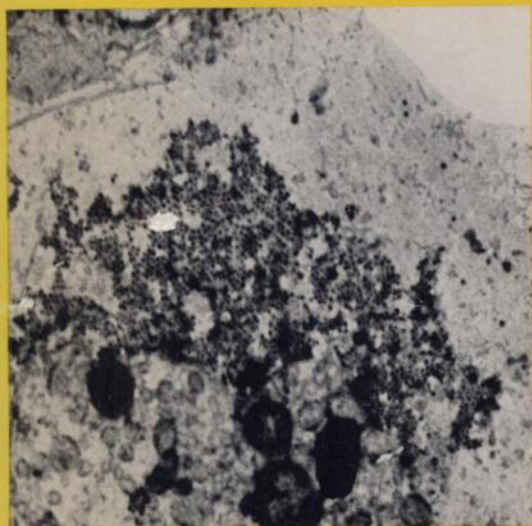


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COVER LEGEND

Albert Claude (b. 1899 in Belgium), now Director of Jules Bordet Institute for Cancer Research in Brussels, worked at the Rockefeller Institute in New York, 1929-1949. He was a pioneer in fractionating cells by differential centrifugation, correlating the fractions to chemical constituents and biochemical functions. Studies on isolated mitochondria, in collaboration with R. Hotchkiss, G. Hogeboom, and W. Schneider, clarified the role of mitochondria as cellular "power plants" (*cf.* The Harvey Lectures, Ser. XLIII, 1947-1948).

Concentration and isolation of the Rous chicken sarcoma agent was achieved by fractionation, by adsorption and elution with alumina gels, and by differential centrifugation (*Science*, 87: 467, 1938). The agent was shown to be a nucleic acid of the ribose type (*Science*, 90: 213, 1939). Electron microscopy studies, in collaboration with K. R. Potter and E. G. Pickels (*Cancer Res.*, 7: 421-430, 1947) showed the Rous agent particles within tumor cells, proving that the agent was a virus.

Upper electron micrograph, from the latter report, shows "colonies" of Rous Chicken Tumor 10 virus in a 13-day-old tumor in a Plymouth Rock pullet. The lower micrograph shows Rous virus in a 5-day-old tumor explant on an embryonated egg. The virus is 70 to 85 μ in diameter, and "budding" can be seen at the cell surface.

We are indebted to Dr. Claude for the illustrations.

This One



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